

# Claims

[c1] 1. A method for constructing extensible markup language (XML) transactions comprising an XML format run on a computer system, said method comprising:

- pre-building static structures of an XML transaction;
- classifying dynamic structures of said XML transaction with empty tags and single occurrence classifiers for repeating dynamic structures;
- building a list of a sequence of said static and dynamic structures;
- linking said list to a type of XML transaction and a predetermined trading partner profile; and
- combining said static structures with said dynamic structures at a runtime of said XML transaction based on said sequence, said type of XML transaction, said trading partner profile, and said dynamic structures of said XML transaction.

[c2] 2. The method of claim 1, wherein said XML transaction occurs in a business-to-business (B2B) electronic environment.

[c3] 3. The method of claim 1, further comprising predefining said trading partner profile associated with a predeter-

mined trading entity.

- [c4] 4. The method of claim 1, wherein said pre-building of said static structures occurs prior to runtime of said XML transaction.
- [c5] 5. The method of claim 1, further comprising creating a copy of a pre-defined data type definition format comprising said XML format.
- [c6] 6. The method of claim 1, further comprising filling said empty tags of said dynamic structures with business data values and building multiple repeating dynamic structures at runtime of said XML transaction.
- [c7] 7. The method of claim 5, further comprising constructing a final XML structure based on said combining, wherein said final XML structure is validated by comparing said final XML structure against said copy of said data type definition format.
- [c8] 8. The method of claim 3, wherein said trading partner profile comprises partner data, communication protocol data, transaction data, transaction format data, and XML format version data.
- [c9] 9. The method of claim 3, wherein said pre-building of said static and dynamic structures occurs at a time of in-

stallation of said trading partner profile in a database in said computer system.

- [c10] 10. The method of claim 9, further comprising:
  - linking said static structures to a type of XML transaction and said predetermined trading partner profile; and
  - storing the linked static structures in said database.
- [c11] 11. A program storage device readable by computer, tangibly embodying a program of instructions executable by said computer to perform a method for constructing extensible markup language (XML) transactions comprising an XML format run on a computer system, said method comprising:
  - pre-building static structures of an XML transaction;
  - classifying dynamic structures of said XML transaction with empty tags and single occurrence classifiers for repeating dynamic structures;
  - building a list of a sequence of said static and dynamic structures;
  - linking said list to a type of XML transaction and a predetermined trading partner profile; and
  - combining said static structures with said dynamic structures at a runtime of said XML transaction based on said sequence, said type of XML transaction, said trading partner profile, and said dynamic structures

of said XML transaction.

- [c12] 12. The program storage device of claim 11, wherein said XML transaction occurs in a business-to-business (B2B) electronic environment.
- [c13] 13. The program storage device of claim 11, wherein said method further comprises predefining said trading partner profile associated with a predetermined trading entity.
- [c14] 14. The program storage device of claim 11, wherein said pre-building of said static structures occurs prior to runtime of said XML transaction.
- [c15] 15. The program storage device of claim 11, wherein said method further comprises creating a copy of a pre-defined data type definition format comprising said XML format.
- [c16] 16. The program storage device of claim 11, wherein said method further comprises filling said empty tags of said dynamic structures with business data values and building multiple repeating dynamic structures at runtime of said XML transaction.
- [c17] 17. The program storage device of claim 15, wherein said method further comprises constructing a final XML

structure based on said combining, wherein said final XML structure is validated by comparing said final XML structure against said copy of said data type definition format.

- [c18] 18. The program storage device of claim 13, wherein said trading partner profile comprises partner data, communication protocol data, transaction data, transaction format data, and XML format version data.
- [c19] 19. The program storage device of claim 13, wherein said pre-building of said static structures occurs at a time of installation of said trading partner profile in a database in said computer system.
- [c20] 20. The program storage device of claim 19, wherein said method further comprises:
  - linking said static structures to a type of XML transaction and said predetermined trading partner profile; and
  - storing the linked static structures in said database.
- [c21] 21. A computer system operable for constructing extensible markup language (XML) transactions comprising an XML format, said computer system comprising:
  - means for pre-building static structures of an XML transaction;

means for classifying dynamic structures of said XML transaction with empty tags and single occurrence classifiers for repeating dynamic structures; means for building a list of a sequence of said static and dynamic structures; means for linking said list to a type of XML transaction and a predetermined trading partner profile; and means for combining said static structures with said dynamic structures at a runtime of said XML transaction based on said sequence, said type of XML transaction, said trading partner profile, and said dynamic structures of said XML transaction.

[c22] 22. The computer system of claim 21, further comprising:

means for predefining said trading partner profile associated with a predetermined trading entity; means for creating a copy of a data type definition format comprising said XML format; means for filling said empty tags of said dynamic structures with business data values and building multiple repeating dynamic structures at runtime of said XML transaction; means for constructing a final XML structure using said means for combining, wherein said final XML structure is validated by comparing said final XML

structure against said copy of said data type definition format;  
means for linking said static structures to a type of XML transaction and said predetermined trading partner profile; and  
means for storing the linked static structures.